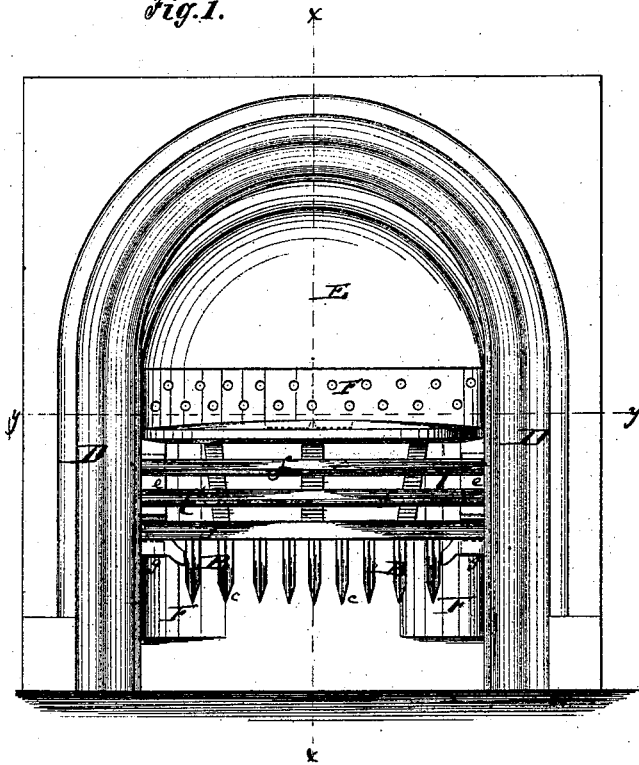


## Fire-Place Grate.

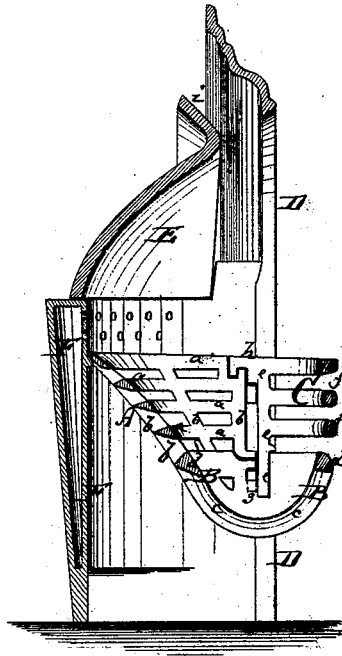
No. 107,483.

Patented Sept. 20, 1870.

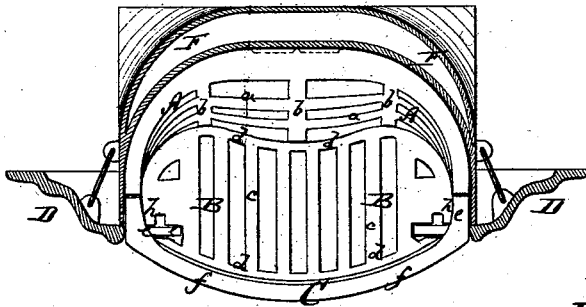
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses.*

A. Bennevent  
L. S. Mabee

*Inventor.*

J. Hackett  
per Mumf  
Attorneys.

# UNITED STATES PATENT OFFICE.

JOSEPH HACKETT, OF LOUISVILLE, KENTUCKY.

## IMPROVEMENT IN FIRE-PLACE GRATES.

Specification forming part of Letters Patent No. **107,483**, dated September 20, 1870.

*To all whom it may concern:*

Be it known that I, JOSEPH HACKETT, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and Improved Fire-Grate and Tile; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same.

Figure 1 represents a front view of my improved grate. Fig. 2 is a vertical transverse section of the same, taken on the plane of the line *x x*, Fig. 1. Fig. 3 is a horizontal section of the same, taken on the plane of the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to certain improvements in the construction of basket-grates, made in sections, to be readily taken apart and put together, as hereinafter more fully described.

My improved basket-grate is made of three pieces, A, B, and C. The back piece, A, which constitutes also the ends of the grate, is made of oval form, and has horizontal bars *a a*, braced by vertical bars *b b*, in which form it is easily cast.

The bottom piece, B, is made of concave transverse bars *c c*, that are at the ends secured to longitudinal bars *d d*.

The front piece, C, is constructed of two upright bars, *e e*, which are connected by the bows *f*.

The bottom piece, B, rests with its ends upon lugs *g*, that project from the frame D of the grate. The back piece, A, rests on the ends of the bottom piece, which has notches for its reception. The uprights of the front piece en-

ter with their lower ends grooves provided for their reception in the bottom piece, B.

At the upper end the front piece, C, has projecting hooks *h h*, which catch over and lock into the upper part of the back piece, A, as is clearly shown in Fig. 2. The front piece, C, serves thus to actually lock the grate together and to the frame D.

The smoke plate or tile E is cast or constructed of clay, so as to constitute a dome over the fire-chamber. It is concave on the front and lower face and convex on the opposite side, and has an upward and backward projecting flange, *i*, at its rounded upper edge for guiding the smoke into the flue. The tile rests upon the hollow back F of the grate, and has or may have tenons projecting into the same, to be thereby firmly secured.

The back frame or lining F of the grate is made hollow, to form an air and combustion chamber. Its front face is perforated at the upper part to discharge the heated air into the products of combustion.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A basket grate composed of three pieces, A, B, and C, substantially as herein shown and described.

2. The front piece, C, of a sectional basket grate, provided with vertical pieces *e* and hooks *h*, for the purpose of locking the entire grate together, substantially as herein shown and described.

JOSEPH HACKETT.

Witnesses:

WHITE W. FORMAN,  
W. J. ANDERSON.